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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,991	07/13/2001	Peter Galicki	TI-29499	3449

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EXAMINER
LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/904,991	GALICKI ET AL.
	Examiner	**Art Unit**	
	Andrew C. Lee	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4 and 6-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4 and 6-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The Office would like to thank the Applicants' remarks and amendments to the

Specification.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1, 7, 2, 8, 4, 9, 6, 10 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Liang et al. (U.S. patent No. 5732086) in view of Lambrecht et al.

(U.S. Patent No. 6549954 B1).

        Regarding claims 1, 7, Liang et al. discloses the limitation of a method of data

processing (column 1, 7 – 10) comprising: connecting a plurality of data processing

nodes in a peer-to-peer relationship, thereby enabling each data processing node to

receive data packets from adjacent input connected nodes and to transmit data packets

to adjacent output connected nodes (Fig. 1, column 4, 42 – 47); at each data processing

node responding to a receipt confirmation data packet received from a source data

processing node by transmitting an acknowledge data packet to the source data

processing node (column 6, lines 55 – 57); and at least one supervisory data processing

node periodically transmitting a receipt acknowledge data packet to each other data

processing node (Abstract, lines 2 – 8; column 2, lines 56 – 60; lines 62 – 66; column 4,

lines 1 – 8, "is iteratively forwarded through the network") and determining a data

processing node has failed upon failure to receive an acknowledge data packet from the

data processing node in response to a receipt confirmation data packet (column 7, lines

1 – 7). Liang et al. does not disclose expressly at each data processing node

examining data packets received from adjacent input connected nodes and selectively

routing the data packet to the current data processing node, routing to an adjacent

output connected node or both, whereby any data processing node can transmit a data

packet to any destination data processing node for forwarding by other data processing

nodes to the destination data processing node; Lambrecht et al. at each data

processing node examining data packets received from adjacent input connected nodes

and selectively routing the data packet to the current data processing node, routing to

an adjacent output connected node or both, whereby any data processing node can

transmit a data packet to any destination data processing node for forwarding by other

data processing nodes to the destination data processing node (column 9, lines 8 – 12;

column 11, lines 9 – 13, lines 36 – 51). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify Liang et al. to include at

each data processing node examining data packets received from adjacent input

connected nodes and selectively routing the data packet to the current data processing

node, routing to an adjacent output connected node or both, whereby any data

processing node can transmit a data packet to any destination data processing node for

forwarding by other data processing nodes to the destination data processing node

such as that taught by Lambrecht et al. in order to to provide an on-chip data transfer

network including object tags or processing lists associated with objects of improved

information routing between multiple on-chip modules (as suggested by Lambrecht et

al. see column 1, lines 21 – 24).

Regarding claims 2, 8, Liang et al. discloses the limitation of a method of data

processing of claimed further comprising the steps of storing health data at each data

processing node concerning the current health operating status of the data processing

node (column 14, lines 3 – 9; lines 19 – 29); and wherein said step of responding to a

receipt confirmation data packet includes transmitting an acknowledge data packet

including the health data (column 14, lines 14 – 18).

Regarding claims 4, 9, Liang et al. discloses the limitation of a method of data

processing of claimed further comprising: at each data processing node storing a

unique node ID (column 3, line 4); at each data processing node storing an indication of

node IDs corresponding to each adjacent output connected node (column 3, lines 1 – 6;

Fig.3); Liang et al. does not disclose expressly said step of selectively routing the data

packet includes routing the data packet to the current data processing node if a header

of the data packet includes the node ID of the data processing node, routing the data

packet to an adjacent output connected node if the header of the data packet includes a

node ID matching the corresponding stored indication of node IDs for the adjacent

output connected node, and not routing the data packet to the current data processing

node or to any adjacent output connected node if the header of the data packet includes

a node ID not matching the node ID of the data processing node or the stored indication

of node IDs for any adjacent output connected node. Lambrecht et al. disclose the

limitation of said step of selectively routing the data packet includes routing the data

packet to the current data processing node if a header of the data packet includes the

node ID of the data processing node, routing the data packet to an adjacent output

connected node if the header of the data packet includes a node ID matching the

corresponding stored indication of node IDs for the adjacent output connected node

(column 9, lines 8 – 12; column 10, lines 62 – 67; column 11, lines 9 – 13, lines 36 –

51;), and not routing the data packet to the current data processing node or to any

adjacent output connected node if the header of the data packet includes a node ID not

matching the node ID of the data processing node or the stored indication of node IDs

for any adjacent output connected node (column 2, lines 51 – 54; lines 22 – 26; column

11, lines 55 – 61). It would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Liang et al. to include said step of selectively

routing the data packet includes routing the data packet to the current data processing

node if a header of the data packet includes the node ID of the data processing node;

routing the data packet to an adjacent output connected node if the header of the data

packet includes a node ID matching the corresponding stored indication of node IDs for

the adjacent output connected node, and not routing the data packet to the current data

processing node or to any adjacent output connected node if the header of the data

packet includes a node ID not matching the node ID of the data processing node or the

stored indication of node IDs for any adjacent output connected node such as that

taught by Lambrecht et al. in order to provide an on-chip data transfer network including

object tags or processing lists associated with objects of improved information routing

between multiple on-chip modules (as suggested by Lambrecht et al. see column 1,

lines 21 – 24).

Regarding claims 6, 10, Liang et al. discloses the limitation of a method of data

processing of claimed wherein each data processing node includes a CPU core and a

bridge circuit connected to the CPU core (Fig. 2, element 20, 40; column 4, lines 28 –

29, lines 42 – 47), the adjacent input connected nodes and the adjacent output

connected nodes (column 4, lines 44 – 47), said method further comprising the steps of:

at each data processing node employing a program running on the CPU core to

periodically reset a timer in the bridge circuit (column 2, lines 54 – 56; column 13, lines

13 – 16; column 13, lines 36 – 46; column 4, lines 1- 8) and at each data processing

node using the bridge circuit to not route any data packet to the current data processing

node or to any adjacent output connected node upon expiration of a time of the timer,

whereby a data processing node having a failed CPU core absorbs all received data

packets (column 7, 1 – 7; column 13, lines 49 – 57).

Response to Arguments

4.   Applicant's arguments with respect to claims 1, 2, 4, 6, 7, 8, 9, 10 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ajit Patel
Primary Examiner

ACL   July 19, 2005